

**BTEC 9693
PATENT****REMARKS****A. Amendment**

Claims 26 and 49 are amended to depend from claims 24 and 47, respectively, and meet the requirements under 37 CFR §1.75(c). Claims 20 and 66 are amended to correct an obvious error by insertion of the word "not." Support for this amendment can be found in claims 19 and 65.

B. Rejection Under 35 U.S.C. §102(b)

Reconsideration is requested of the rejection of claims 1, 4, 6-14, 16, 17, 23, 24, 26, 27, 29-37, 39, 40, 46, 47, 49, 50, 52-60, 62 and 63 under 35 U.S.C. §102(b) as being anticipated by Corrigan (WO 00/03930).

As noted at paragraph 5 of the instant specification, Corrigan describes a packaging film comprising a blend of hydrophobic and *hydrophilic* polymers characterized as having differing water transmission rates, and an antifungal agent that is activated by the presence of water. Ethylene/vinyl alcohol ("EVA") is described as a preferred hydrophilic polymer having a high water release rate, and linear low density polyethylene ("LLDPE") is described as a preferred hydrophobic polymer having a low water release rate (see page 2, lines 2-18 and lines 25-31; Example 1 at page 4, lines 9-12; and Example 2 at page 8, lines 15-17).

Claim 1, in relevant part, is directed to a gas generating and gas releasing monolayer article consisting essentially of a polymer and gas generating solid dispersed therein, the article being free of a hygroscopic compound. Independent claim 23, in relevant part, is directed to a gas generating and gas releasing monolayer article comprising a first polymer and gas generating solid dispersed therein, the article being free of a second polymer and a hygroscopic compound. Independent claim 46, in relevant part, is directed to a gas generating and gas releasing article comprising a first polymer and gas generating solid dispersed therein, the article being free of a second polymer and a hygroscopic compound. Hygroscopic compounds are defined as having

BTEC 9693
PATENT

the property of adsorbing moisture from the air.¹ The instant specification describes polymers such as polyvinyl alcohol (e.g., EVA) as having polar moieties, such as hydroxyl groups, that interact with polar vapors such as water leading to high water absorption and permeability (see paragraph 31). Polymers that are inert to gases, vapors and liquids are preferred (see paragraph 31). Further, the article forming process should be substantially non-aqueous because the articles of the invention release gas through water vapor mediated gas source oxidation, thus aqueous based polymers such as, for example, polyvinyl alcohol are generally not preferred (see paragraph 34). Corrigan therefore does not anticipate claims 1 (or claims 4, 6-14, 16 and 17 depending therefrom), 23 (or claims 24, 26, 27, 29-37, 39 and 40 depending therefrom) or 46 (or claims 47, 49, 50, 52-60, 62 and 63 depending therefrom) as it includes polymers which are hygroscopic.

C. Rejection Under 35 U.S.C. §103(a)

Reconsideration is requested of the rejection of claims 15, 18, 20, 21, 38, 41, 43, 44, 61, 64, 66 and 67 as obvious over Corrigan, claims 18, 19, 22, 41, 42, 45, 64, 65 and 68 as obvious over Corrigan in view of Sanderson (WO 03/018431), and claims 2, 3, 5, 25, 28, 48 and 51 over Corrigan in view of Aamodt et al. (U.S. Patent No. 6,325,969).

Corrigan teaches a packaging film comprising a polymer blend including a hydrophilic polymer and a hydrophobic polymer. The hydrophilic (i.e., hygroscopic) polymer of Corrigan is required to provide moisture transmission that is required for activation of the antifungal agent. Corrigan therefore teaches away from the instant gas generating and gas releasing articles that exclude the presence of a hygroscopic (i.e., hydrophilic) compound. It is respectfully submitted, therefore, that claims 1 (and dependent claims 15, 18, 20 and 21), 23 (and dependent claims 38, 41, 43 and 44) and 46 (and dependent claims 61, 64, 66 and 67) are patentable under 35 U.S.C. §103(a) over Corrigan.

Sanderson does not overcome the deficiencies of Corrigan. Sanderson describes a moisture-activated sulfur dioxide gas releasing multi-layer device comprising a gas generating

¹The Condensed Chemical Dictionary at page 553 (Gessner G. Hawley ed., 10th ed. 1981).

**BTEC 9693
PATENT**

matrix containing 10% to 30% by weight of sodium metabisulfite dispersed in a plastisol comprising about 58% by weight polyvinyl chloride ("PVC") polymer and about 40% by weight of a plasticizer (page 8, lines 11-28). The highly plasticized matrix is of insufficient strength to form a gas releasing article and therefore must be supported by a carrier sheet and a cover sheet (page 6, line 11 to page 7, line 7). Sanderson would not have motivated one skilled in the art to eliminate the hydrophilic polymer from Corrigan to arrive at the articles of claims 1, 23 and 46. Sanderson teaches that such articles would lack strength and mechanical integrity. Although the polymeric articles of the present invention may be optionally combined with other films, substrates, fabrics and the like to produce multi-layer films with specific characteristics needed for a particular use, as embodied in claims 18, 19, 22, 41, 42, 45, 64, 65, and 68, the articles are fully functional as a single polymer (or single polymer family) gas releasing article as embodied in claims 1, 23 and 46. It is respectfully submitted, therefore, that claims 1 (and dependent claims 18, 19 and 22), 23 (and dependent claims 41, 42 and 45) and 46 (and dependent claims 64, 65 and 68) are patentable under 35 U.S.C §103(a) over Corrigan in view of Sanderson.

Aamodt does not overcome the deficiencies of Corrigan. Aamodt describes a first porous paper product impregnated with a first chemical and a second porous paper product impregnated with a second chemical. Upon contacting the first and second paper products, the first and second chemicals react to produce an antimicrobial or biocidal chemical agent such as chlorine dioxide. Aamodt does not describe or suggest polymeric articles and does not suggest any advantage to eliminating the hydrophilic polymer from Corrigan to arrive at the articles of claims 1, 23 and 46. At most, Aamodt and Corrigan would have motivated one skilled in the art to prepare a packaging film comprising a two-polymer blend of hydrophobic and hydrophilic polymers and a blend of water-activated antifungal agents. It is respectfully submitted, therefore, that claims 1 (and dependent claims 2, 3 and 5), 23 (and dependent claims 25 and 28) and 46 (and dependent claims 48 and 51) are patentable under 35 U.S.C §103(a) over Corrigan in view of Aamodt.

BTEC 9693
PATENT

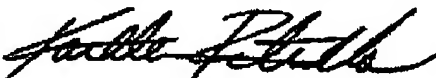
CONCLUSION

In view of the above, the invention defined in independent claims 1, 23 and 46 is respectfully submitted as patentable over the cited references. Claims 2-22, 24-45 and 47-68, which depend directly or indirectly from claims 1, 23 and 46, respectively, are likewise patentable over the cited art for the reasons stated with respect to claims 1, 23 and 46 and by reason of the additional requirements they introduce.

In light of the foregoing, applicants request entry of the amendments and withdrawal of the objection under rejection under 37 CFR §1.75(c), 35 U.S.C. §102(b) and 35 U.S.C. §103(a), and solicit allowance of the pending claims. The Examiner is invited to contact the undersigned attorney should any issues remain unresolved.

Applicant requests an extension of time to and including October 31, 2005 for filing a response to the above-mentioned Office action. The Commissioner is requested to charge this fee and any fee deficiency in connection with this response to Deposit Account No. 19-1345.

Respectfully submitted,



Kathleen M. Petrillo, Reg. No. 35,076
SENNIGER POWERS
One Metropolitan Square, 16th Floor
St. Louis, MO 63102
(314) 231-5400

KMP/JDH/lam